

Amendments to the Claims

Please cancel claims 10, 18 and 26 without prejudice. Please amend the remaining claims as shown below in the List of Claims.

Listing of Claims

- 1-8. (Cancelled)
9. (Currently amended) A process for obtaining a purified gas by removing polysulfanes from crude gas formed during the production of hydrogen sulfide, wherein said crude gas comprises greater than 80% by volume of H₂S and 100-2000 vpm of polysulfanes of the formula H₂S_n, wherein n = 2-8, said process comprising:
 - a) passing said crude gas through a wash system where said crude gas is brought into contact with a wash solution comprising water or methanol; and
 - b) collecting said purified gas from the wash solution of step a).
10. (Cancelled)
11. (Currently amended) The process of ~~claim 10~~ claim 9, wherein said polysulfanes are present in said crude gas at 400-1500 vpm.
12. (Previously presented) The process of claim 9, wherein said wash system is a jet washer.
13. (Previously presented) The process of claim 9, further comprising a second wash step in which the purified gas produced in step a) is passed through a counter-current washer comprising an aqueous or methanolic solution.
14. (Previously presented) The process of claim 9, further comprising a second wash step in which the purified gas produced in step a) is passed through an adsorber bed.

15. (Previously presented) The process of claim 9, wherein relative to said crude gas, the polysulfanes in said purified gas have been reduced by 50-99.5%.
16. (Previously presented) The process of claim 9, wherein said process is carried out at a temperature of 0-150°C.
17. (Currently amended) A process for obtaining a purified gas by removing polysulfanes from crude gas formed during the production of hydrogen sulfide, wherein said crude gas comprises greater than 80% by volume of H₂S and 100-2000 vpm of polysulfanes of the formula H₂S_n, wherein n = 2-8, and wherein said process comprises comprising:
 - a) passing said crude gas through a wash system comprising an aqueous or methanolic solution containing 0.5-20 wt% of an alkali or alkaline earth hydroxide or oxide; and
 - b) collecting said purified gas from the aqueous or methanolic solution of step a).
18. (Cancelled)
19. (Previously presented) The process of claim 18, wherein said polysulfanes are present in said crude gas at 400-1500 vpm.
20. (Previously presented) The process of claim 17, wherein relative to said crude gas, the polysulfanes in said purified gas have been reduced by 50-99.5%.
21. (Previously presented) The process of claim 17, wherein said wash system is a jet washer and said process further comprises a second wash step in which the purified gas of step a) is passed through either: a counter-current washer comprising an aqueous or methanolic solution; or an adsorber bed.
22. (Currently amended) A process for obtaining a purified gas by removing polysulfanes from crude gas formed during the production of hydrogen sulfide, wherein said crude gas comprises greater than 80% by volume of H₂S and 100-2000 vpm of polysulfanes

of the formula H_2S_n , wherein $n = 2-8$, and wherein said process comprises comprising:

- a) passing said crude gas through a wash system comprising an aqueous or methanolic solution containing 1-20 wt% of a compound selected from the group consisting of:
 - i) an organic amine of the formula $(C_nH_{2n+1})_xNH_y$, where $n = 1-3$, $x = 2$ or 3 , and $y = 0$ or 1 ;
 - ii) an amino alcohol of formula $(C_nH_{2n+1}O)_xNH_y$, where $n = 1-3$, $x = 2$ or 3 , and $y = 0$ or 1 ; and
 - iii) ammonia;
 - b) collecting said purified gas from the aqueous or methanolic solution of step a).
23. (Previously presented) The process of claim 22, wherein said compound is an organic amine of the formula $(C_nH_{2n+1})_xNH_y$, where $n = 1-3$, $x = 2$ or 3 , and $y = 0$ or 1 .
24. (Previously presented) The process of claim 22, wherein said compound is an amino alcohol of formula $(C_nH_{2n+1}O)_xNH_y$, where $n = 1-3$, $x = 2$ or 3 , and $y = 0$ or 1 .
25. (Previously presented) The process of claim 22, wherein said compound is ammonia.
26. (Cancelled)
27. (Previously presented) The process of claim 22, wherein relative to said crude gas, the polysulfanes in said purified gas have been reduced by 50-99.5%
28. (Previously presented) The process of claim 22, wherein said wash system is a jet washer and said process further comprises a second wash step in which the purified gas of step a) is passed through either: a counter-current washer comprising an aqueous or methanolic solution; or an adsorber bed.